BRUHATH BANGALORE MAHANAGARA PALIKE

Name of the Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of the Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Estimate Cost : Rs.

QUALITY CONTROL REPORTS TO

Asst. Executive Engineer,
Kodigehalli Sub Division,
BBMP, Bangalore.

CIVIL-TECH CONSULTANTS & ENGINEERS

Building & Highway Material Testing Laboratory
NABL ACCREDITED LABORATOTY AS PER ISO / IEC – 17025:2005
No.23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar, Bangalore – 560 079.

QUALITY CONTROL REPORTS FOR

WET MIX MACADAM(WMM)

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **7875**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	140	140	1.8	98.2	95-100
22.4	2510	2650	33.7	66.3	60-80
11.2	1250	3900	49.5	50.5	40-60
4.75	1005	4905	62.3	37.7	25-40
2.36	990	5895	74.9	25.1	15-30
0.600	850	6745	85.7	14.3	8-22
0.075	780	7525	95.6	4.4	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8230**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	185	185	2.2	97.8	95-100
22.4	2685	2870	34.9	65.1	60-80
11.2	1310	4180	50.8	49.2	40-60
4.75	1080	5260	63.9	36.1	25-40
2.36	985	6245	75.9	24.1	15-30
0.600	865	7110	86.4	13.6	8-22
0.075	800	7910	96.1	3.9	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8045**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	160	160	2.0	98.0	95-100
22.4	2585	2745	34.1	65.9	60-80
11.2	1250	3995	49.7	50.3	40-60
4.75	1075	5070	63.0	37.0	25-40
2.36	990	6060	75.3	24.7	15-30
0.600	855	6915	86.0	14.0	8-22
0.075	750	7665	95.3	4.7	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers

23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8135**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	250	250	3.1	96.9	95-100
22.4	2515	2765	34.0	66.0	60-80
11.2	1250	4015	49.4	50.6	40-60
4.75	1080	5095	62.6	37.4	25-40
2.36	995	6090	74.9	25.1	15-30
0.600	865	6955	85.5	14.5	8-22
0.075	780	7735	95.1	4.9	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8010**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	300	300	3.7	96.3	95-100
22.4	2605	2905	36.3	63.7	60-80
11.2	1210	4115	51.4	48.6	40-60
4.75	1050	5165	64.5	35.5	25-40
2.36	985	6150	76.8	23.2	15-30
0.600	855	7005	87.5	12.5	8-22
0.075	755	7760	96.9	3.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8030**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	385	385	4.8	95.2	95-100
22.4	2510	2895	36.1	63.9	60-80
11.2	1200	4095	51.0	49.0	40-60
4.75	1000	5095	63.4	36.6	25-40
2.36	990	6085	75.8	24.2	15-30
0.600	865	6950	86.6	13.4	8-22
0.075	785	7735	96.3	3.7	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/Gradation/2014-15

29.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. H.S. Nataraj,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.

Reference : EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013

Date of Testing : 29.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8070**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	330	330	4.1	95.9	95-100
22.4	2610	2940	36.4	63.6	60-80
11.2	1250	4190	51.9	48.1	40-60
4.75	1050	5240	64.9	35.1	25-40
2.36	955	6195	76.8	23.2	15-30
0.600	890	7085	87.8	12.2	8-22
0.075	780	7865	97.5	2.5	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/AIV/2014-15

29.05.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	29.05.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	386	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	84	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	301	
4	Aggregate Impact value = percent fines	21.82	22.02	
	100* (W_2/W_1)%			**21.92**

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the laborat

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/AIV/2014-15

29.05.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	29.05.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	87	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301	303	
4	Aggregate Impact value = percent fines	22.62	22.31	
	100* (W_2/W_1)%			22.46

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the laborat

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/AIV/2014-15

29.05.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	29.05.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	380	381	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	78	79	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	302	302	
4	Aggregate Impact value = percent fines	20.53	20.73	
	100* (W_2/W_1)%			**20.63**

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the laborat

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/S-T/2014-15 29.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	29.05.2014

Result : Flakiness Index = **11.25%**

Elongation Index = **13.10%**

Result : Combined Flakiness & Elongation index **24.35%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the laborat

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/S-T/2014-15 29.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	29.05.2014

Civil-Tech Consultants & Engineers Bangalore

Result : Flakiness Index = **12.35%**

Elongation Index = **13.09%**

Result : Combined Flakiness & Elongation index **25.44%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the laborat

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/W.No 07/HSN/WMM/S-T/2014-15 29.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. H.S. Nataraj,** Contractor, Bangalore.
Name of Work	Improvements to Roads, Drains and Asphalting to Roads in Vinayaka Layout 2nd Main, 1st stage in Ward No.07, BBMP, Bangalore.
Reference	EE/BTP/BBMP/E-TND/446/2012-13 Dated: 16.03.2013
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	29.05.2014

Civil Tech Consultants & Engineers Bangalore

Result : Flakiness Index = **12.89%**

Elongation Index = **13.10%**

Result : Combined Flakiness & Elongation index **25.99%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory

→ The results indicated above are based on the tests carried out on the samples received in the labora

→ Any Query regarding the report must be reported within 30 days from the date of testing.

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
Basaveshwaranagar,
Bangalore-560079.